# Aditya Vadrevu

## **Software Engineer**

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LinkedIn: www.linkedin.com/in/adi77

GitHub: https://github.com/adivadrevu

### **Skills**

#### Languages, Concepts & Frameworks:

Java, Python, Object Oriented Programming, Data Structures and Algorithms, Collection APIs, Multi-threading, Exception Handling, Hibernate, Servlet, Spring (Core, SpringBoot, JDBC, Data JPA, MVC, REST APIs, Security), JUnit, Genrics, Microservices

#### **Best Practices:**

Unit Testing (JUnit, Mockito), Automation, Peer Code Review

#### Database, Cloud & Other Tools:

SQL/NoSQL(MySQL, MongoDB), GraphQL, AWS (EC2, S3, Lambda, RDS), Docker, Kubernetes, Terraform, Jenkins, Git/GitHub, Maven, Gradle, Eclipse, IntelliJ, Visual Studio Code.

#### Operatina System:

Windows, Mac, Linux.

#### Course Work:

Software Engineering, Database Management Systems, BigData Analytics, Operating Systems, Analysis of Computer Algorithms, Machine Learning, Fundamentals of Artificial Intelligence(AI), Software Development of Artificial Intelligence (AI), Computer Networks.

### Education

M.S., Computer Science Aug 2022 - May 2024 University of North Texas (Denton, TX) GPA: 3.9/4.0

B.S., Computer Science Aug 2009 - May 2013 Satvabhama University (Chennai, India)

## **Work Authorization**

OPT-FAD

## **Current Location**

Milpitas, CA (Open to relocate)

## **Professional Summary**

- Results-oriented software professional with a Master's in Computer Science, experienced in practical software development as a Graduate Research Intern and Graduate Teaching Assistant.
- Proficient in Java, Data Structures and Algorithms with a solid understanding of Python, Machine Learning and Al applications.
- · Skilled in back-end development with strong object-oriented programming concepts, utilizing frameworks like Spring (Spring Boot, JDBC, MVC, REST APIs) and good knowledge in front-end tools like HTML, CSS, JavaScript and React.js.
- Hands-on experience building software applications and projects with a solid understanding of System Design concepts.
- · Proven success in optimizing systems, managing projects and enhancing user experiences to reduce errors, improve performance and increase user engagement.
- Eager to leverage my diverse software development background to deliver impactful results.

## **Open Simulations/Source projects & Certifications**

Software Engineer - JPMorgan Chase & Co

- Certified from JPMorgan Chase &Co. Utilized JPMorgan Chase's open-source library and perspective to generate a live graph displaying a

data feed for traders to monitor in a clear and visually appealing manner.

## Software Engineer - Verizon Cloud Platform

- Certified from Verizon by completing a job simulation involving by a hypothetical new VPN product for Verizon's Cloud Computing team. Used command line Python to test whether Verizon's VPN met the cloud-native traits, i.e. redundancy, resiliency and least-privilege.
- AWS Essential Training for Developers LinkedIn

September 2024

- Proficient in using EC2, S3, Lambda, RDS and API Gateway as fundamental AWS services to design, develop and deploy scalable, cloudbased applications. Certified from LinkedIn.

## Accomplishments

Categorizing Car Insurance Claims (A Predictive Analysis study) – <u>A Machine Learning Application</u>

- Developed a predictive analysis tool using Python and Scikit-learn to categorize car insurance claims based on various attributes.
- Implemented version control using Git and hosted the project on GitHub, enabling seamless collaboration, version tracking and review.

#### Diabetes Prediction Tool (A Diabetes Prediction Tool with user input) – A Machine Learning Application

Spring 2024

- Built a Diabetes Prediction Tool with Python, utilizing Flask for the web interface and Scikit-learn for implementing the machine learning
- Used PostgreSQL for managing user data and employed Maven for project build management. Managed the project with Git for version control and deployed it on AWS ensuring scalability and accessibility.

## Employment Self-Service portal (An Employee site to see his forms and information) - A Web Application

- Developed a web application for employees to view forms and information using Java, Spring Boot and React.js for the frontend.
- Implemented Web APIs to connect the frontend with the backend services and pushed code to GitHub maintaining version control.

## iCare System (A Comprehensive Healthcare Management solution) – A Web Application

Fall 2022

- Designed and developed a healthcare management system using Java and Spring Boot to ensure scalability and modularity.
- Conducted extensive testing using JUnit and Mockito to ensure application reliability, resulting in a 95% test coverage across critical components. Pushed code to GitHub, maintaining version control and facilitating collaboration on the project.

## **Professional Experience**

## **University of North Texas**

**Graduate Teaching Assistant** August 2023 - May 2024 Denton, Texas

- Collaborated with Professors in the Software Engineering and Fundamentals of Artificial Intelligence courses, guiding students through the Software Development Life Cycle (SDLC) and methodologies, and assisting them with use case and state-chart diagrams
- Mentored students in AI principles, helping them develop algorithms and implement projects using relevant tools and libraries.
- Led student groups in web application development, assisting with error correction and supporting the building of both back-end and front-
- Provided hands-on support in software design and implementation, assisting students in breaking down complex problems into manageable modules, debugging code and applying best practices in coding standards and version control.
- Conducted weekly discussion sessions on system programming, object-oriented programming concepts, algorithms and their practical
- Worked on instructional materials and assessments, ensuring content was current in the field of AI, and provided support for students in debugging and optimizing their code.

Graduate Research Intern Artificial Intelligence/Machine Learning Program 2023

May 2023 – July 2023 Denton, Texas

- Graduate Research Intern in Artificial Intelligence/Machine Learning (AI/ML) Program, 2023 Conducted research on AI/ML applications, with a focus on clinical data summarization and classification.
- Research cited on https://ai.unt.edu/unt-ai-summer-research-program.
- Developed and fine-tuned models for clinical note classification, achieving over 80% accuracy in identifying diagnoses and procedures using BigBird-RoBERTa, and evaluated the performance of multiple NLP models for clinical summarization.
- Collaborated with research teams to analyze and interpret model outputs, to identify key performance metrics and offering data-driven recommendations for model improvement and deployment in clinical applications.
- Utilized machine learning frameworks such as BigBird, RoBERTa and BigBird-Pegasus to process large-scale datasets and extract actionable insights, demonstrating proficiency in model training and evaluation.
- Conducted in-depth research on applying transformer models for summarization and classification of clinical notes, which improved the efficiency of healthcare data management. - Performed comprehensive data analysis to refine feature selection, optimize model parameters and improve model interpretability,
- resulting in enhanced accuracy and reliability of clinical data predictions. Tools and Technologies: Python, ML, TensorFlow, PyTorch and other NLP libraries in developing, implementing and evaluating the performance of transformer models.

# **Lorvenk Tech, Infosys, Genpact**

**Contractor - Functional Consultant** Dec 2013 - July 2022 Hyderabad, India

- Worked as SAP Functional Consultant as a contractor for end clients like Megha Engineering & Infrastructures Limited and SGI Automotive,  $providing\ expertise\ in\ the\ implementation\ and\ management\ of\ SAP\ Plant\ Maintenance\ (PM)\ in\ both\ S/4\ HANA\ and\ ECC6.0\ environments.$
- Managed data migration from legacy systems, performed unit and integration testing, and ensured seamless operations by providing enduser training and go-live support using BDC and LTMC tools.

References available upon Request